CLAIMS

1. In a computer system, a method for providing a user interface for use with a stylus, the method comprising:

receiving a stylus-based user input; and

responsive to receiving the input, displaying a menu comprising selectable items to allow a user, by selecting one of the selectable items, to direct the computer system to generate right-mouse button input or to interpret one or more subsequent stylus-based user inputs as hover cursor input, keyboard-like input, or handwriting input.

2. A method as recited in claim 1, further comprising:

determining whether an item of the selectable items has been selected within a predetermined amount of time since presenting the menu; and

responsive to determining that the item has not been selected within the predetermined amount, dismissing the menu.

3. A method as recited in claim 1, wherein the menu comprises an action area that is receptive to stylus-based input, and wherein the method further comprises:

identifying stylus input outside of the action area; and

responsive to identifying stylus input outside of the action area, dismissing the menu.

1   **4.**   A method as recited in claim 1, wherein responsive to receiving the

2   input further comprises:

3   detecting selection of an item of the selectable items; and

4   responsive to detection the selection:

5   (a) hiding the menu; and

6   (b) performing a task corresponding to the item.

7

8   **5.**   A method as recited in claim 1, wherein the task comprises: (a)

9   generaing right-mouse-button input; (b) moving a cursor over a display screen; (c)

10   generating keyboard-like data; or (d) generating handwritten data.

11

12   **6.**   A method as recited in claim 1, further comprising:

13   detecting user selection of an item of the selectable items; and

14   responsive to detecting the user selection:

15   (a) hiding the menu;

16   (b) performing a task corresponding to the item, the task having a

17   result; and

18   (c) communicating the result as input to a program.

1   **7.**   A computer–readable medium comprising computer-executable

2 instructions for providing a user interface for use with a stylus, the computer-

3 executable instructions comprising instructions for:

4   re-routing stylus-based user input to a first application that is executing

5 under an operating system (OS), the input being re-routed such that the input is not

6 received by the operating system for distribution to any second application that is

7 executing under the OS;

8   analyzing the input to determine whether the input should be treated as a

9 mouse-like input; and

10   responsive to determining that the input should not be treated as a mouse-

11 like input, displaying a menu comprising selectable items to allow a user to direct

12 the computer system to interpret one or more subsequent stylus-based user inputs

13 as right-mouse button input, hover cursor input, keyboard-like input, or

14 handwriting input by selecting one of the selectable items.

15

16   **8.**   A computer–readable medium as recited in claim 7, wherein the

17 second application is designed to receive user input from the operating system.

18

19   **9.**   A computer–readable medium as recited in claim 7, wherein the

20 instructions for analyzing the input further comprise instructions for determining

21 that the input should be treated as a mouse-like event when the event is a single

22 quick touch or a double quick touch.

10. A computer–readable medium as recited in claim 7, wherein analyzing the input further comprise instructions for determining that the input should not be treated as a mouse-like event when the input is a continuous touch input.

11. A computer–readable medium as recited in claim 7, further comprising instructions responsive to determining that the event should be treated as a mouse-like event, the instructions communicating the input to the operating system for subsequent distribution to any other applications such as the second application.

12. A computer–readable medium as recited in claim 7, further comprising instructions for:

determining whether an item of the selectable items has been selected within a predetermined amount of time since presenting the menu; and

responsive to determining that the item has not been selected within the predetermined amount, dismissing the menu.

13. A computer–readable medium as recited in claim 7, wherein the selectable items are displayed in an action area, and wherein the computer-executable instructions further comprise instructions for:

identifying stylus-based user input outside of the action area; and

responsive to identifying the stylus-based user input, dismissing the menu.

1   **14.**   A computer–readable medium as recited in claim 7, further

2   comprising instructions for:

3   detecting selection of an item of the selectable items; and

4   responsive to detection the selection:

5   (a) hiding the menu; and

6   (b) performing a task corresponding to the item.

7

8   **15.**   A computer–readable medium as recited in claim 14, wherein the

9   task comprises: (a) communicating right mouse click input to the second

10   application; (b) moving a cursor over a display screen; (c) generating keyboard-

11   like input; or (d) generating and interpreting handwritten data.

12

13   **16.**   A computer–readable medium as recited in claim 7, wherein the

14   instructions for allowing a user to specify that the computer system is to interpret a

15   subsequent stylus-based user input event as a mouse-right-button click event, a

16   hover cursor event, a keyboard-like event, or a handwriting event further comprise

17   instructions for:

18   detecting selection of an item of the selectable items; and

19   responsive to detecting the selection:

20   (a) hiding the menu;

21   (b) performing a task that corresponds to the item, the task having a

22   result; and

23   (c) communicating the result as input to the second application.

1   **17.**   A computing device comprising:

2   a processor;

3   a memory that is operatively coupled to the processor, the memory

4 comprising computer-executable instructions, the processor being configured to

5 fetch and execute the computer-executable instructions for:

6   receiving a stylus-based user input; and

7   responsive to receiving the input, displaying a menu comprising

8 selectable items to allow a user to direct the computer system to interpret one or

9 more subsequent stylus-based user inputs as right-mouse button input, hover

10 cursor input, keyboard-like input, or handwriting input by selecting one of the

11 selectable items.

12

13   **18.**   A computing device as recited in claim 17, further comprising

14 instructions for:

15   determining whether an item of the selectable items has been selected

16 within a predetermined amount of time since presenting the menu; and

17   responsive to determining that the item has not been selected within the

18 predetermined amount, dismissing the menu.

19

20   **19.**   A computing device as recited in claim 17, wherein the menu

21 comprises an action area that is receptive to stylus-based input, and wherein the

22 computing device further comprises instructions for:

23   identifying stylus-based user input outside of the action area; and

24   responsive to identifying the stylus-based user input, dismissing the menu.

20. A computing device as recited in claim 17, further comprising instructions for:

    detecting selection of an item of the selectable items; and

    responsive to detection the selection:

        (a) hiding the menu; and

        (b) performing a task corresponding to the item.

21. A computing device as recited in claim 20, wherein the task comprises instructions for: (a) communicating a right mouse click event to a computer program; (b) moving a cursor over a display screen; (c) generating keyboard-like data; or (d) generating and interpreting handwritten data.

22. A computing device as recited in claim 17, wherein responsive to receiving the input, the instructions further comprise instructions for:

    detecting selection of an item of the selectable items; and

    responsive to detecting the selection:

        (a) hiding the menu;

        (b) performing a task that corresponds to the item, the task having a result; and

        (c) communicating the result as input to the second application.

1   **23.**   A computing device comprising:

2   processing means for:

3   receiving a stylus-based user input; and

4   responsive to receiving the input, displaying a menu comprising

5   selectable items to allow a user to direct the computer system to interpret one or

6   more subsequent stylus-based user inputs as right-mouse button input, hover

7   cursor input, keyboard-like input, or handwriting input by selecting one of the

8   selectable items.

9

10   **24.**   A computing device as recited in claim 23, further comprising

11   means for:

12   if one of the selectable items is selected:

13   (a) hiding the menu;

14   (b) performing a task corresponding to the one selected item, the

15   task having a result; and

16   (c) communicating the result as input to a program.

17   **25.**   A computing device as recited in claim 23, further comprising

18   means for if an item of the selectable items has not been selected for a

19   predetermined amount of time since displaying the menu, dismissing the menu.

20

21   **26.**   A computing device as recited in claim 23, wherein the menu

22   comprises an action area that is receptive to stylus-based input, and wherein the

23   computing device further comprises means for if stylus input is identified outside

24   of the action area, dismissing the control.

25

27. A computing device as recited in claim 23, further comprising means for:

    if an item of the selectable items is selected:

        (a) hiding the menu; and

        (b) performing a task corresponding to the item.

28. A computing device as recited in claim 23, wherein the task comprises means for: (a) communicating a right mouse click event to a computer program; (b) moving a cursor over a display screen; (c) generating keyboard-like data; or (d) generating and interpreting handwritten data.

29. A user interface comprising:

    an action area comprising at least one helper icon, the action area being displayed responsive to receiving a stylus-based user input, the at least one helper icon being selectable to allow a user to specify that a computer system is to interpret one or more subsequent stylus-based user inputs as mouse-right-button input, hover cursor input, keyboard-like input, or handwriting input.

30. A user interface as recited in claim 29, wherein the input is not a single quick touch or a double quick touch input.

31. A user interface as recited in claim 29, wherein the event is a continuous touch event.

32.   A user interface as recited in claim 29, wherein the action area is displayed responsive to receiving a first stylus-based user input, and wherein the user specifies that a computer system is to interpret one or more subsequent stylus-based user inputs as mouse-right-button input, hover cursor input, keyboard-like input, or handwriting input by generating a second stylus-based user input over a corresponding helper icon of the at least one helper icon, the second stylus-based user input being different from the first stylus-based user input.

33.   A user interface as recited in claim 29 wherein the user interface, responsive to selection of the at least one helper icon:

(a) hides the action area;

(b) performs a task that corresponds to the at least one helper icon; and

(c) communicates the result as input to another computer program.

34.   A user interface as recited in claim 29, wherein if the at least one helper icon has not been selected for a predetermined amount of time since displaying the action area, the user interface dismisses the control.

35.   A user interface as recited in claim 29, wherein if the user has moved a stylus beyond a perimeter of the action area, the user interface dismisses the action area and the at least one helper icon.

36.   A user interface as recited in claim 29 wherein selection of the at least one helper icon causes the user interface to (a) hide the action area; and (b) perform a task that corresponds to the at least one helper icon.

1   **37.**   A user interface as recited in claim 35, wherein the task comprises:

2   (a) communicating right mouse click input to another program; (b) moving a

3   cursor over a display screen; (c) generating keyboard-like data; or (d) generating

4   and interpreting handwritten data.

5

6   **38.**   A method for providing a user interface for use with a stylus in a

7   computing device having a display, the method comprising:

8   receiving stylus-based user input at a location on the display, the location

9   corresponding to a previously displayed user interface object with a corresponding

10   context of operation; and

11   responsive to receiving the user input, presenting a menu on the display, the

12   menu being independent of the corresponding context of operation.

13

14   **39.**   A method as recited in claim 38, wherein the menu further

15   comprises one or more selectable items, wherein the stylus based user input is a

16   first user input, and wherein the method further comprises:

17   receiving a second stylus-based user input that indicates user selection of an

18   item of the selectable items; and

19   responsive to receiving the second user input, generating a mouse-right-

20   button input event.

21

1   **40.**   A method as recited in claim 38, wherein the menu further

2 comprises one or more selectable items, wherein the stylus based user input is a

3 first user input, and wherein the method further comprises:

4   receiving a second stylus-based user input that indicates user selection of an

5 item of the selectable items; and

6   responsive to receiving the second user input, directing the computing

7 device to interpret one or more subsequent stylus-based user inputs as hover cursor

8 input, keyboard-like input, or handwriting input.

9

10   **41.**   A method as recited in claim 38, wherein the menu further

11 comprises one or more selectable items, and wherein if an item of the selectable

12 items has not been selected for a predetermined amount of time since presenting

13 the menu, dismissing the menu.

14

15   **42.**   A method as recited in claim 38, wherein the menu further

16 comprises one or more selectable items in an action area, and wherein the method

17 further comprises:

18   identifying stylus input outside of the action area; and

19   responsive to identifying stylus input outside of the action area, dismissing

20 the control.

21

43. A method as recited in claim 38, wherein the menu further comprises one or more selectable items, wherein the stylus based user input is a first user input, and wherein the method further comprises:

receiving a second stylus-based user input that indicates user selection of an item of the selectable items; and

responsive to receiving the second user input,

(a) hiding the menu; and

(b) performing a task corresponding to the item.

44. A method as recited in claim 38, wherein the menu further comprises one or more selectable items, wherein the stylus based user input is a first user input, and wherein the method further comprises:

receiving a second stylus-based user input that indicates user selection of an item of the selectable items; and

responsive to receiving the second user input,

(a) hiding the menu; and

(b) performing a task corresponding to the item, the task having a result; and

(c) communicating the result as input to a program.

45. A method as recited in claim 44, wherein the task comprises: (a) generating right-mouse-button data; (b) moving a cursor over the display; (c) generating keyboard-like data; or (d) generating handwriting data.

46. A computer-readable medium comprising computer-executable instructions for providing a user interface for use with a stylus in a computing device having a display, the computer-executable instructions comprising instructions for:

receiving stylus-based user input at a location on the display, the location corresponding to a previously displayed user interface object with a corresponding context of operation; and

responsive to receiving the user input, presenting a menu on the display, the menu being independent of the corresponding context of operation.

47. A computer-readable medium as recited in claim 46, wherein the menu further comprises one or more selectable items, wherein the stylus based user input is a first user input, and wherein the instructions further comprise instructions for:

receiving a second stylus-based user input that indicates user selection of an item of the selectable items; and

responsive to receiving the second user input, generating a mouse-right-button input event.

1   **48.** A computer-readable medium as recited in claim 46, wherein the

2   menu further comprises one or more selectable items, wherein the stylus based

3   user input is a first user input, and wherein the instructions further comprise

4   instructions for:

5   receiving a second stylus-based user input that indicates user selection of an

6   item of the selectable items; and

7   responsive to receiving the second user input, directing the computing

8   device to interpret one or more subsequent stylus-based user inputs as hover cursor

9   input, keyboard-like input, or handwriting input.

10

11   **49.** A computer-readable medium as recited in claim 46, wherein the

12   menu further comprises one or more selectable items, and wherein the instructions

13   further comprise instructions for:

14   determining whether an item of the selectable items has been selected

15   within a predetermined amount of time since presenting the menu; and

16   responsive to determining that the item has not been selected within the

17   predetermined amount, dismissing the menu.

18

19   **50.** A computer-readable medium as recited in claim 46, wherein the

20   menu further comprises one or more selectable items in an action area, and

21   wherein the instructions further comprise instructions for:

22   identifying stylus input outside of the action area; and

23   responsive to identifying stylus input outside of the action area, dismissing

24   the control.

1   **51.** A computer-readable medium as recited in claim 46, wherein the

2 menu further comprises one or more selectable items, wherein the stylus based

3 user input is a first user input, and wherein the instructions further comprise

4 instructions for:

5   receiving a second stylus-based user input that indicates user selection of an

6 item of the selectable items; and

7   responsive to receiving the second user input,

8   (a) hiding the menu; and

9   (b) performing a task corresponding to the item.

10

11   **52.** A computer-readable medium as recited in claim 46, wherein the

12 menu further comprises one or more selectable items, wherein the stylus based

13 user input is a first user input, and wherein the instructions further comprise

14 instructions for:

15   receiving a second stylus-based user input that indicates user selection of an

16 item of the selectable items; and

17   responsive to receiving the second user input,

18   (a) hiding the menu; and

19   (b) performing a task corresponding to the item, the task having a

20 result; and

21   (c) communicating the result as input to a program.

22

53. A computer-readable medium as recited in claim 52, wherein the task comprises: (a) generating right-mouse-button data; (b) moving a cursor over the display; (c) generating keyboard-like data; or (d) generating handwriting data.

54. A computing device having a display, the computing device for providing a user interface for use with a stylus, the computing device comprising:

a processor; and

a memory coupled to the processor, the memory comprising computer-executable instructions, the processor being configured to fetch and execute the computer-executable instructions for:

receiving stylus-based user input at a location on the display, the location corresponding to a previously displayed user interface object with a corresponding context of operation; and

responsive to receiving the user input, presenting a menu on the display, the menu being independent of the corresponding context of operation.

55. A computing device as recited in claim 53, wherein the menu further comprises one or more selectable items, wherein the stylus based user input is a first user input, and wherein the instructions further comprise instructions for:

receiving a second stylus-based user input that indicates user selection of an item of the selectable items; and

responsive to receiving the second user input, generating a mouse-right-button input event.

56. A computing device as recited in claim 53, wherein the menu further comprises one or more selectable items, wherein the stylus based user input is a first user input, and wherein the instructions further comprise instructions for:

receiving a second stylus-based user input that indicates user selection of an item of the selectable items; and

responsive to receiving the second user input, directing the computing device to interpret one or more subsequent stylus-based user inputs as hover cursor input, keyboard-like input, or handwriting input.

57. A computing device as recited in claim 53, wherein the menu further comprises one or more selectable items, and wherein the instructions further comprise instructions for:

determining whether an item of the selectable items has been selected within a predetermined amount of time since presenting the menu; and

responsive to determining that the item has not been selected within the predetermined amount, dismissing the menu.

58. A computing device as recited in claim 53, wherein the menu further comprises one or more selectable items in an action area, and wherein the instructions further comprise instructions for:

identifying stylus input outside of the action area; and

responsive to identifying stylus input outside of the action area, dismissing the control.

1   **59.**   A computing device as recited in claim 53, wherein the menu further

2 comprises one or more selectable items, wherein the stylus based user input is a

3 first user input, and wherein the instructions further comprise instructions for:

4   receiving a second stylus-based user input that indicates user selection of an

5 item of the selectable items; and

6   responsive to receiving the second user input,

7   (a) hiding the menu; and

8   (b) performing a task corresponding to the item.

9

10   **60.**   A computing device as recited in claim 53, wherein the menu further

11 comprises one or more selectable items, wherein the stylus based user input is a

12 first user input, and wherein the instructions further comprise instructions for:

13   receiving a second stylus-based user input that indicates user selection of an

14 item of the selectable items; and

15   responsive to receiving the second user input,

16   (a) hiding the menu; and

17   (b) performing a task corresponding to the item, the task having a

18 result; and

19   (c) communicating the result as input to a program.

20

21   **61.**   A computing device as recited in claim 60, wherein the task

22 comprises: (a) generating right-mouse-button data; (b) moving a cursor over the

23 display; (c) generating keyboard-like data; or (d) generating handwriting data.

24

1   **62.**   A computing device having a display, the computing device for

2 providing a user interface for use with a stylus, the computing device comprising

3 processing means for:

4   receiving stylus-based user input at a location on the display, the location

5 corresponding to a previously displayed user interface object with a corresponding

6 context of operation; and

7   responsive to receiving the user input, presenting a menu on the display, the

8 menu being independent of the corresponding context of operation.

9

10   **63.**   A computing device as recited in claim 53, wherein the menu further

11 comprises one or more selectable items, wherein the stylus based user input is a

12 first user input, and wherein the computing device further comprises means for:

13   receiving a second stylus-based user input that indicates user selection of an

14 item of the selectable items; and

15   responsive to receiving the second user input, generating a mouse-right-

16 button input event.

17

18   **64.**   A computing device as recited in claim 53, wherein the menu further

19 comprises one or more selectable items, wherein the stylus based user input is a

20 first user input, and wherein the computing device further comprises means for:

21   receiving a second stylus-based user input that indicates user selection of an

22 item of the selectable items; and

23   responsive to receiving the second user input, directing the computing

24 device to interpret one or more subsequent stylus-based user inputs as hover cursor

25 input, keyboard-like input, or handwriting input.

1   **65.** A computing device as recited in claim 53, wherein the menu further

2   comprises one or more selectable items, and wherein the computing device further

3   comprises means for:

4   determining whether an item of the selectable items has been selected

5   within a predetermined amount of time since presenting the menu; and

6   responsive to determining that the item has not been selected within the

7   predetermined amount, dismissing the menu.

8

9   **66.** A computing device as recited in claim 53, wherein the menu further

10   comprises one or more selectable items in an action area, and wherein the

11   computing device further comprises means for:

12   identifying stylus input outside of the action area; and

13   responsive to identifying stylus input outside of the action area, dismissing

14   the control.

15

16   **67.** A computing device as recited in claim 53, wherein the menu further

17   comprises one or more selectable items, wherein the stylus based user input is a

18   first user input, and wherein the computing device further comprises means for:

19   receiving a second stylus-based user input that indicates user selection of an

20   item of the selectable items; and

21   responsive to receiving the second user input,

22   (a) hiding the menu; and

23   (b) performing a task corresponding to the item.

1   **68.**   A computing device as recited in claim 53, wherein the menu further

2 comprises one or more selectable items, wherein the stylus based user input is a

3 first user input, and wherein the computing device further comprises means for:

4   receiving a second stylus-based user input that indicates user selection of an

5 item of the selectable items; and

6   responsive to receiving the second user input,

7   (a) hiding the menu; and

8   (b) performing a task corresponding to the item, the task having a

9 result; and

10   (c) communicating the result as input to a program.

11

12   **69.**   A computing device as recited in claim 68, wherein the task

13 comprises: (a) generating right-mouse-button data; (b) moving a cursor over the

14 display; (c) generating keyboard-like data; or (d) generating handwriting data.